|   | Index of Claims Ap |               |                 |          |          |           |           |                |           |          |    |                            |          | pplication No. |             |                    |                     |              |     |             |           |          | Applicant(s) |                 |            |                 |               |    |                              |           |          |   |   |
|---|--------------------|---------------|-----------------|----------|----------|-----------|-----------|----------------|-----------|----------|----|----------------------------|----------|----------------|-------------|--------------------|---------------------|--------------|-----|-------------|-----------|----------|--------------|-----------------|------------|-----------------|---------------|----|------------------------------|-----------|----------|---|---|
|   |                    |               |                 |          |          |           |           |                |           |          |    |                            |          | 10             | 10/659,344  |                    |                     |              |     |             |           |          |              | PAKHOMOV ET AL. |            |                 |               |    |                              |           |          |   |   |
|   |                    |               |                 |          |          |           |           |                |           |          |    |                            |          |                | Examiner    |                    |                     |              |     |             |           |          |              | $\dashv$        | Art Unit   |                 |               |    |                              | AL        | <u>•</u> |   |   |
|   |                    |               |                 |          |          |           |           |                |           |          |    |                            |          |                |             |                    |                     |              |     |             |           |          |              |                 |            |                 |               |    |                              |           |          |   |   |
|   | Ar                 |               |                 |          |          |           |           |                |           |          |    |                            |          |                | Anne V. Lai |                    |                     |              |     |             |           |          |              | 2636            |            |                 |               |    |                              |           |          |   |   |
|   |                    |               |                 |          |          |           |           |                |           |          |    |                            |          |                |             |                    |                     |              |     |             |           |          |              | П               |            |                 |               |    | $\neg$                       |           |          |   |   |
|   |                    |               | √               | Rejected |          |           |           |                | -         |          | (1 | hrough numer.<br>Cancelled |          |                |             | al)                |                     | N            |     | Non-Elected |           |          | ∍d           |                 | A          | Appeal          |               |    |                              |           |          |   |   |
|   |                    |               | Н               |          |          |           |           |                | -         |          |    |                            | _        |                |             | F                  | ╁                   |              |     |             |           | H        |              |                 |            |                 | $\dashv$      |    |                              |           |          |   |   |
|   |                    |               | =               | Allowed  |          |           | d         |                |           | ÷        |    | Restricted                 |          |                | d           |                    | 1                   |              |     | Inte        | terferenc |          | е            |                 | 0          | Objected        |               |    |                              |           |          |   |   |
|   |                    |               | Ш               |          |          | _         |           |                | ı         |          |    |                            |          |                |             |                    |                     | L            | 1_  |             |           |          | لـــــا      |                 |            |                 |               |    |                              |           |          |   |   |
| [ | Cla                | aim           |                 |          | Date     |           |           |                |           |          |    | Claim                      |          |                | 1           | <u> </u>           |                     |              | ate | _           |           |          |              | Cla             | laim       |                 | Date          |    |                              |           |          | $\square$                               | ı |
|   | ਰ                  | nal           | 8               |          | l        |           |           |                |           |          |    |                            | ਰ        | na             |             |                    |                     |              |     |             |           |          |              | <u>_</u>        | nal        |                 |               |    |                              |           |          |   | ı |
|   | Final              | Original      | 12/20/04        |          | ļ        |           | 1         |                |           |          |    |                            | Final    | Original       |             |                    |                     |              |     |             |           |          |              | Final           | Original   |                 |               |    |                              |           |          |   | ı |
| - |                    |               | V               | _        | 4        | 4         | -         | +              | _         |          | _  |                            | <u> </u> | 51             | +           | $\dashv$           | $\dashv$            | +            |     | ╀           | +         | _        | -            | _               | 101        | Н               | +             | -  | Н                            | _         |          | Н                                       | ı |
| - |                    | 2             | V               |          | $\dashv$ | $\dashv$  | +         | +              | $\dashv$  |          | -  |                            |          | 52             | $\vdash$    | H                  | +                   | +            | +   | +           | +         | $\dashv$ | ╟            | $\dashv$        | 102        | $\vdash$        | +             | +  | Н                            | $\dashv$  | +        | Н                                       | ı |
| [ |                    | 3             | ٧               |          |          | $\Box$    | $\Box$    |                |           |          |    |                            |          | 53             |             |                    |                     | 1            |     |             |           |          |              |                 | 103        |                 | ightharpoonup |    | П                            |           |          | П                                       | ı |
| } |                    | <u>4</u><br>5 | V<br>V          | -        | $\dashv$ | $\dashv$  | -         | -              | $\dashv$  |          | _  |                            |          | 54<br>55       |             |                    | 4                   | +            | +   | ╀           | +         | Н        | -            | $\dashv$        | 104<br>105 | Н               | +             | ╁  | Н                            | $\dashv$  | +        | $\vdash\vdash$                          | ı |
| ŀ |                    | 6             | H               |          | $\dashv$ | $\dashv$  | _         | $\dashv$       |           | $\neg$   |    |                            |          | 56             |             |                    | +                   | $\dagger$    | 1   | $\dagger$   | +         | H        | ╟            |                 | 106        | $\Box$          | $\top$        | +  | Н                            | $\dashv$  |          | Н                                       | ı |
|   |                    | 7             |                 |          |          | $\Box$    |           | $\Box$         | $\Box$    |          |    |                            |          | 57             |             |                    | I                   |              |     | L           |           |          | F            |                 | 107        |                 |               |    |                              | $\Box$    |          | П                                       | ı |
| } |                    | 8             | $\vdash$        | _        | $\dashv$ |           | -         | -              | $\dashv$  | -        | -  |                            |          | 58<br>59       |             | $\vdash$           | $\dashv$            | +            |     | ╁           | ╁         | H        | -            | $\dashv$        | 108<br>109 | $\vdash$        |               | +  | $\vdash$                     | $\dashv$  |          | $\vdash$                                | • |
| Ì |                    | 10            |                 |          |          | Ì         | $\exists$ | $\exists$      |           |          |    |                            |          | 60             |             |                    | $\exists$           |              |     | $\perp$     |           |          |              |                 | 110        |                 | $\perp$       |    |                              | $\exists$ |          |   | ı |
|   |                    | 11            | Ш               |          |          | _         | _         | _              | 4         |          |    |                            |          | 61             |             |                    | 4                   | $\perp$      | -   | L           |           |          |              |                 | 111        | Ш               | _             | 1  |                              | _         |          | Ш                                       | ı |
| ŀ |                    | 12<br>13      | $\vdash$        | _        | $\dashv$ | $\dashv$  | -+        | $\dashv$       | $\dashv$  |          |    |                            |          | 62<br>63       |             | $\vdash$           | $\dashv$            | +            | +   | ╁           | +         | -        | ╟            | $\dashv$        | 112<br>113 | $\vdash$        | ╁             | +- | $\vdash$                     | $\dashv$  | +        | $\vdash$                                | ı |
| İ |                    | 14            |                 |          |          |           |           |                |           |          |    |                            |          | 64             |             |                    |                     |              |     |             |           |          |              |                 | 114        |                 |               |    |                              |           |          | П                                       | ı |
|   |                    | 15<br>16      | Н               | _        | 4        | 4         | $\dashv$  | -              |           |          | _  |                            | _        | 65<br>66       |             |                    | 4                   | $\dashv$     | _   | ╀           | +         | <u> </u> | -            |                 | 115<br>116 | $\sqcup$        | - -           | +  |                              | 4         | _        | $\square$                               | ı |
| } |                    | 17            | Н               |          | $\dashv$ | 1         | $\dashv$  | +              |           |          |    |                            | _        | 67             |             | H                  | +                   | $\dashv$     | +   | t           | +         | H        | ╁            |                 | 117        | $\vdash$        | +             | 1  |                              | $\dashv$  |          | Н                                       | ı |
| [ |                    | 18            |                 |          |          | 1         | $\Box$    |                |           |          |    |                            |          | 68             |             |                    |                     | $\perp$      |     | L           |           |          |              |                 | 118        |                 | $\perp$       |    |                              |           |          | П                                       | ı |
| } |                    | 19<br>20      | H               | _        | ᆛ        | $\dashv$  |           | $\dashv$       | $\dashv$  | _        | _  |                            |          | 69<br>70       |             | $\left  - \right $ | +                   | +            | +   | ╀           | +         | -        | -            | _               | 119<br>120 | $\vdash \vdash$ | +             | +  | -                            | $\dashv$  | -        | $\vdash$                                | ı |
| t |                    | 21            |                 | _        |          |           |           | _              |           |          |    |                            |          | 71             |             |                    |                     |              |     |             |           |          |              |                 | 121        |                 |               |    |                              |           |          | Ħ                                       | 1 |
|   |                    | 22            |                 |          | 4        |           | 4         |                |           |          |    |                            |          | 72             | $\perp$     |                    | 4                   | 1            | 4   | L           |           |          |              |                 | 122        |                 |               |    |                              |           |          | $\square$                               | ı |
| } |                    | 23<br>24      | Н               |          | $\dashv$ | $\dashv$  | $\dashv$  | $\dashv$       |           |          |    |                            |          | 73<br>74       |             | $\vdash$           | +                   | +            | +   | ╁           | +         | H        | -            | -               | 123<br>124 |                 | +             | +  | $\vdash$                     | -         |          | H                                       | ı |
| į |                    | 25            |                 |          |          |           |           |                |           |          |    |                            |          | 75             |             |                    | 丁                   | 士            |     |             |           |          |              |                 | 125        |                 |               |    |                              |           |          |   | ı |
| . |                    | 26            | $\square$       |          |          | $\dashv$  | -         | 4              |           | $\dashv$ | _  |                            | <u> </u> | 76             | _           | $\vdash$           | 4                   | +            |     | ╀           | +         | _        | -            |                 | 126        | $\dashv$        | -             | -  | $\vdash \vdash$              | -         |          | $\vdash$                                | ı |
| } |                    | 27<br>28      | Н               |          | $\dashv$ | $\dashv$  | +         | $\dashv$       | $\dashv$  |          |    |                            | <u> </u> | 77<br>78       |             | $\dashv$           | +                   | $\dot{+}$    | +   | t           | +         | $\dashv$ | ╟            |                 | 127<br>128 | $\dashv$        | ╁             | +  | Н                            | -         |          | $\vdash$                                | ı |
|   |                    | 29            |                 |          | _        | $\Box$    | $\exists$ | 耳              |           |          |    |                            |          | 79             |             |                    | $\Box$              | $\downarrow$ |     | L           |           |          |              |                 | 129        |                 |               | 1  |                              |           |          |   | 1 |
| - |                    | 30<br>31      | Н               | $\dashv$ | $\dashv$ | $\dashv$  | $\dashv$  | +              | _         | $\dashv$ | _  |                            |          | 80             | +           | $\dashv$           | $\dashv$            | +            | +   | ╀           | +         | -        | -            |                 | 130<br>131 | $\vdash \vdash$ | -             | +- | -                            | -         |          | $\vdash$                                | ı |
| ŀ |                    | 32            | H               |          | $\dashv$ |           | $\dashv$  | $\dashv$       | $\exists$ | $\dashv$ |    |                            |          | 82             | +           | $\vdash \vdash$    | $\dashv$            | +            | +   | $\vdash$    |           | H        | ┢            |                 | 132        | -               | _             | +- | H                            | $\dashv$  | +        | $\forall$                               | ı |
| ļ |                    | 33            |                 |          |          | $\Box$    |           |                |           |          |    |                            |          | 83             | ·           |                    | $\Box$              | #            |     | L           |           |          |              |                 | 133        |                 |               |    |                              | $\exists$ |          | П                                       |   |
| } |                    | 34<br>35      | $\vdash$        |          | $\dashv$ | -+        | +         | $\dashv$       | -         |          |    |                            |          | 84<br>85       |             | $\dashv$           | +                   | +            | +-  | ╀           | +         | $\dashv$ | -            | _               | 134<br>135 | $\dashv$        | +             | +- | $\vdash$                     | $\dashv$  |          | $\vdash \vdash$                         |   |
| ŀ |                    | 36            |                 |          | 士        |           |           | $\exists$      |           |          |    |                            |          | 86             |             |                    | 士                   | <u>_</u>     |     | t           |           |          | E            |                 | 136        |                 | 士             | 士  |                              | 寸         | 士        | $\Box$                                  |   |
| ļ |                    | 37            |                 | $\Box$   | $\Box$   |           | $\Box$    | $\blacksquare$ |           |          |    |                            |          | 87             | $\Box$      |                    |                     | $\prod$      | T   | F           |           |          | F            |                 | 137        |                 |               |    |                              | $\exists$ | $\bot$   | П                                       |   |
| } |                    | 38<br>39      | $\vdash$        |          | +        | -         | +         | $\dashv$       | -         | $\dashv$ |    |                            | <b> </b> | 88<br>89       | +           | $\vdash \vdash$    | +                   | +            | +   | $\vdash$    | +         | H        | $\vdash$     | $\dashv$        | 138<br>139 | $\vdash \vdash$ |               | +- | $\left  \cdot \cdot \right $ | $\dashv$  |          | +-                                      |   |
| ŀ |                    | 40            |                 |          | 士        |           |           | ⇉              | _         |          |    |                            |          | 90             |             |                    | 士                   | $\exists$    | 士   |             |           |          |              |                 | 140        |                 | 士             | 士  |                              |           | ╧        |   |   |
|   |                    | 41            |                 | $\dashv$ | $\dashv$ | 1         | [         | 4              | 4         | $\Box$   |    |                            |          | 91             | $\Box$      | П                  | $\dashv$            | Ţ            | 1   | F           | +         | Щ        | Ĺ            |                 | 141        | $\Box$          | $\perp$       | Ī  | П                            | $\dashv$  | $\perp$  | П                                       |   |
| } |                    | 42<br>43      | $\vdash \vdash$ | $\dashv$ | $\dashv$ | $\dashv$  | $\dashv$  | $\dashv$       | $\dashv$  | -        |    |                            |          | 92<br>93       | +           | $\vdash \vdash$    | +                   | +            | +   | +           | +         | $\dashv$ | -            |                 | 142<br>143 | -               | +             | +- | $\vdash$                     | $\dashv$  |          | +                                       |   |
| ļ |                    | 44            |                 |          | 二        | $\exists$ | $\exists$ | $\downarrow$   |           |          |    |                            |          | 94             |             |                    | $\rightrightarrows$ | 士            |     |             | $\top$    |          | L            |                 | 144        |                 |               | 上  |                              | $\exists$ | 士        | Ħ                                       |   |
| - |                    | 45<br>46      | ${oxed{H}}$     | $\dashv$ | +        | $\dashv$  | +         | $\dashv$       |           | $\dashv$ |    |                            |          | 95<br>96       | +           | $\vdash \vdash$    | $\dashv$            | +            | +   | -           | +         | Щ        | -            |                 | 145<br>146 |                 | +             | -  | $\sqcup$                     |           | - -      | $\vdash$                                |   |
| } |                    | 47            |                 | $\dashv$ | _+       | $\dashv$  | _         | _              | $\dashv$  | _        | _  |                            |          | 97             | +           |                    | $\dashv$            | _            | +-  | $\dagger$   | +-        |          | -            |                 | 147        |                 | $\dashv$      | +  | H                            |           | +        | H                                       |   |
| ļ |                    | 48            |                 |          |          | 4         | _         | _              |           |          |    |                            |          | 98             |             | $\Box$             | $\downarrow$        | _            | 1   | L           | <b>_</b>  |          | L            |                 | 148        |                 | 1             | I  |                              |           | $\bot$   | 口                                       |   |
| } |                    | 49<br>50      | $\vdash \vdash$ | $\dashv$ | $\dashv$ | +         | $\dashv$  | +              | $\dashv$  |          |    |                            |          | 99<br>100      | +           | $\mid - \mid$      | +                   | +            | +-  | $\vdash$    | +         | $\dashv$ | -            |                 | 149<br>150 | $\dashv$        | +             | +  | Н                            | $\dashv$  | +-       | $\vdash$                                |   |
| L |                    |               |                 |          |          |           |           |                |           |          |    | J:::::                     |          | 1.00           |             | $\perp$            |                     |              |     | 1           |           | ┈        |              |                 |            |                 |               |    |                              |           |          | لــــــــــــــــــــــــــــــــــــــ |   |